Welcome to the latest COVID-19 Update. Information with regards COVID-19 is emerging at a rapid pace, this evidence update will be produced weekly during the crisis. It will highlight a few sources of knowledge and appropriate documents – most websites are open access at the time of writing. Note at the moment most publishers are allowing free access to articles on COVID-19 that would normally be restricted to paid subscriptions. Please feel free to print and share the bulletin.

Should an article be difficult to obtain try accessing via your Athens account, or please contact us and we will obtain it on your behalf. If you do not have an NHS Open Athens account register at https://openathens.nice.org.uk/

Alternatively, RWT have an online document supply request form for requesting journal articles, leading to a faster and more efficient service. Register now at http://www.basedoc.co.uk with your Base Library card username and password.

If you cannot access the full text or do not have a BASE Library card, please contact the library, who will be able to assist you at rwh-tr.Belllibrary@nhs.net

RWT Libraries are no longer physically staffed due to the COVID-19 pandemic, but we are all working from home and will continue to support your information and knowledge needs. Please contact us on the library generic e-mail above. Thank you.

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UK Government Reports

This guidance is for anyone who works in adult social care. It provides advice on how you can manage your personal mental health in the current circumstances. It also provides adult social care employers with guidance, tools and advice on how to take care of the wellbeing of staff at work. *Guidance*. Freely available at: https://www.gov.uk/government/publications/coronavirus-covid-19-health-and-wellbeing-of-the-adult-social-care-workforce


A new online portal that makes it easy for care homes to arrange deliveries of coronavirus test kits has been launched today. As the national testing capacity has increased, the government is prioritising testing for care homes and other areas with the greatest need. All symptomatic and asymptomatic care home staff and residents in England are now eligible for testing. Testing will be prioritised for care homes that look after the over 65s. *Press Release*. Freely available at: https://www.gov.uk/government/news/government-launches-new-portal-for-care-homes-to-arrange-coronavirus-testing

The public is advised to consider wearing face coverings in enclosed public spaces such as shops, trains and buses to help reduce the spread of coronavirus. *Press Release*. Freely available at: https://www.gov.uk/government/news/public-advised-to-cover-faces-in-enclosed-spaces


Provisional analysis of deaths involving the coronavirus (COVID-19), by different occupational groups, among males and females aged 20 to 64 years in England and Wales. *Statistics and Mortality*. Freely available at: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/bulletins/coronaviruscovid19relateddeathsbyoccupationenglandandwales/deathsregistereduptoandincluding20april2020
Office of National Statistics. **Deaths involving COVID-19 by local area and socioeconomic deprivation: deaths occurring between 1 March and 17 April 2020.** ONS, 1st May 2020. [Online]. Provisional counts of the number of deaths and age-standardised mortality rates involving the coronavirus (COVID-19) between 1 March and 17 April 2020 in England and Wales. Figures are provided by age, sex, geographies down to local authority level and deprivation indices. **Statistics and Mortality.** Freely available at: [https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsinvolvingcovid19bylocalareasanddeprivation/deathsoccurringbetween1marchand17april](https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsinvolvingcovid19bylocalareasanddeprivation/deathsoccurringbetween1marchand17april)


Public Health England. **COVID-19: guidance for care of the deceased.** PHE, 31st March 2020. Updated 12th May 2020. [Online]. This guidance contains information for: those who are managing a death in secondary care; general practitioners (GPs) managing a death outside of a healthcare setting; members of the public who identify a death in the community; staff in residential care settings including care homes and hospices; first responders managing a death in the community; those involved in the transportation of the deceased; funeral directors and others managing a death in the community, including those organising transport for mourners; those who are participating in or supporting faith and belief practices that involve close contact with the deceased and those who are organising transport to and from a funeral. **Guidance.** Freely available at: [https://www.gov.uk/government/publications/covid-19-guidance-for-care-of-the-deceased](https://www.gov.uk/government/publications/covid-19-guidance-for-care-of-the-deceased)


Covid-19 Evidence Update, Issue 8 15th May 2020
When used in the hospital or home setting, technical guidance is available to inform the management of oronasal face patients care setting need to be considered. However, there may be a role for its use in patients with COVID there is no evidence of benefit of oxygen therapy in the absence of hypoxemia and adverse effects in the palliative sources that focuses specifically on the management of patients with COVID research exists (i.e. cancer and COPD). Whilst research literature is limited, guidance is emerging from multiple PWD during the COVID pandemic.

Is oxygen an effective treatment option to alleviate the symptoms of breathlessness for patients dying with COVID-19 and what are the potential harms? CEBM, 7th May 2020. [Online].

There is no available evidence to inform the use of oxygen therapy in the management of breathlessness for patients dying with COVID-19. The use of oxygen therapy to manage breathlessness in patients receiving palliative care remains a controversial topic, with limited and low-quality evidence of its effectiveness in conditions where published research exists (i.e. cancer and COPD). Whilst research literature is limited, guidance is emerging from multiple sources that focuses specifically on the management of patients with COVID-19. Emerging guidelines outline that there is no evidence of benefit of oxygen therapy in the absence of hypoxemia and adverse effects in the palliative care setting need to be considered. However, there may be a role for its use in patients with COVID-19 to wean patients from ventilator support and where hypoxemia is present and dyspnoea cannot be controlled by other means. When used in the hospital or home setting, technical guidance is available to inform the management of oronasal face.

Centre for Evidence Based Medicine (University of Oxford)


People with diabetes (PWD) are included in the group at increased risk of severe illness from coronavirus (COVID-19) and have been advised to observe stringent social distancing measures. This creates a difficult situation for PWD and their Health Care Providers (HCP) as PWD require an annual review including retinal screening as part of their screening for complications, which involves a physical visit to a community or hospital facility or an eye clinic. This rapid review addresses the following questions: How can we help stratify annual retinal screening programmes for PWD during the COVID-19 pandemic? Can we do remote retinal review for PWD? What can we do to control the risk factors for development or progression of diabetic retinopathy during the COVID-19 pandemic? Is hydroxychloroquine safe to use in individuals with diabetic retinopathy? Rapid Review. Freely available at: https://www.cebm.net/covid-19/rapid-review-diabetic-retinopathy-screening-during-the-covid-19-pandemic/

Allsop, M. et al. Is oxygen an effective treatment option to alleviate the symptoms of breathlessness for patients dying with COVID-19 and what are the potential harms? CEBM, 7th May 2020. [Online].

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masks fitted over the whole face. Where oxygen therapy is considered, it should be tailored to the individual and a formal assessment made of its efficacy for reducing breathlessness and improving quality of life for that person. Where there is an absence of patient benefit or where its disadvantages (e.g. discomfort of masks or nasal cannula, drying of mucous membranes) outweigh any likely symptomatic benefit, it should be discontinued. If palliative oxygen therapy is considered for the community setting, it should balance patient factors with cost effectiveness, resources and safety. Rapid Review. Treatment. Freely available at: https://www.cebm.net/covid-19/is-oxygen-an-effective-treatment-option-to-alleviate-the-symptoms-of-breathlessness-for-patients-dying-with-covid-19-and-what-are-the-potential-harms/


Fourteen evidence-based, guideline-supported medications that significantly reduce emergency hospital admissions were identified. These apply to major chronic disease populations considered higher risk for COVID-19 morbidity and mortality. There is COVID-19 related guidance on optimising use of some of these medications, including indications for altering doses and taking medication breaks. Health care practitioners and policy-makers should consider optimising therapeutic combinations and doses of these medications. Consideration may also be needed to adjust dispensing intervals to ensure that supplies are maintained, explore home delivery services, waive dispensing fees, and provide remote consultation support for patients to follow prescribed regimens. Rapid Review. Freely available: https://www.cebm.net/covid-19/preventing-non-covid-19-hospital-admissions-during-a-pandemic-a-rapid-overview-of-the-evidence-for-high-value-medications/


Remdesivir is an antiviral drug, currently in development by the pharmaceutical company Gilead Sciences. It is thought that remdesivir may have a beneficial effect in treating patients with COVID-19, and the US FDA recently authorized emergency use of remdesivir during the pandemic. The authors describe the current research programme for remdesivir across all registered COVID-19 clinical trials. Clinical Trials. Freely available at: https://www.cebm.net/covid-19/covid-19-clinical-trials-report-card-remdesivir/


Chloroquine and hydroxychloroquine (CQ/HCQ) are antimalarial medications and are also used in the treatment of lupus erythematosus and rheumatoid arthritis. Both have been prominently touted as prospective candidates for the treatment and/or prevention of infection by SARS-Cov-2. This has led to an explosion of research into these treatments. Here the authors assess the trial designs specified in national and international registry entries of CQ/HCQ trials. Clinical Trial. Freely available at: https://www.cebm.net/covid-19/covid-19-clinical-trials-report-card-chloroquine-and-hydroxychloroquine/


Two weeks ago, the National Institutes of Health (NIH) announced in a press release that their clinical trial on the experimental antiviral drug remdesivir, run by the National Institute of Allergy and Infectious Diseases (NIAID), shows that it “accelerates recovery from advanced COVID-19”. Patients in the trial who received remdesivir had a 31% faster time to recovery than those who received placebo. The same day, Dr. Anthony Fauci announced in the Oval Office that the trial demonstrates “a clear-cut, significant positive effect”, and that remdesivir “will be the standard of care”, but he gave no information about the findings that had led him to reach that conclusion. Two days later, the FDA issued an "emergency use authorization", meaning that remdesivir can now be “distributed and used by licensed health care providers to treat adults and children hospitalized with severe COVID-19”. The World Health Organization (WHO) is now engaging with the US Government to make remdesivir widely available. This may look like important progress at a difficult time. However, there are problems with the NIAID trial, and with how the results have been used. Apart from the press release in which the NIH mentioned two results, the trial itself remains unpublished, so we have no information on the methods, other outcomes (like the need for ventilation), full results, or how the data were analysed. This context is essential for doctors, patients, and policymakers to interpret the results of the trial accurately and make an informed judgement about the benefits and harms of remdesivir, but instead a single isolated positive result is being used to inform policy and treatment decisions on a massive scale. A more detailed analysis is promised in a “forthcoming report” with no specific timeline provided. This is indefensible: the NIAID should publish the full
methods and results of the trial, including all outcomes and adverse events, for critical peer review and discussion, before results are used to inform the widespread treatment of patients. Research and Trials. Freely available at: https://www.cebm.net/covid-19/the-fda-has-authorised-remdesivir-for-use-in-covid-19-patients-but-theres-no-good-evidence-it-reduces-mortality/


Heneghan, C. and Oke, J. UK data for assessing COVID-19 activity. CEBM, 11th May 2020. [Online]. In coming out of the pandemic the UK Prime Minister said “We are going to be driven by the science, the data and public health. Here the authors set out the data that inform any changes in healthcare activity. The data flows from NHS 111 calls, ambulance calls, through GP consultation data and surveillance data to hospital admissions and critical care bed occupancy and finally to deaths (the last to rise or fall). The page also includes links to National COVID-19 surveillance reports and care home data. Statistics. Freely available at: https://www.cebm.net/covid-19/covid-19-uk-data-for-assessing-the-way-out-of-lockdown/


Jefferson, T. and Heneghan, C. COVID-19: understanding the unknown in acute respiratory infections. CEBM. 11th May 2020. [Online]. Since the mid-1990s, we have been supposedly preparing for a pandemic. Much of the preparedness has been focussed on one agent, influenza – and herd thinking – despite two warnings: SARs-Co-V-1 and MERS. Massive amounts of resources have been invested in stockpiling specific treatments or preventive biologics which have never been properly tested and hardly used. Yet, their capacity to stop the spread of influenza is debatable. Surveillance studies carried out in defined whole populations (usually nursing homes or student accommodation) over a defined time period have given us valuable insight into what is actually happening. Surveillance. Freely available at: https://www.cebm.net/covid-19/19-understanding-the-unknown-in-acute-respiratory-infections/

Lloyd-Williams, M. et al. Activities delivered at home by family carers to maintain cognitive function in people with dementia socially isolating during COVID-19: evidence for non-technology based activities/interventions. CEBM, 7th May 2020. [Online]. The evidence highlights that engaging people with dementia in activities that they find enjoyable or those that link to past work/hobbies can be helpful in giving a sense of purpose and meaning during this time of isolation. Furthermore, non-technology based interventions may have some practical advantages for those currently isolating at home since they are inexpensive and do not require extensive training. Rapid Review. Mental Health. Freely available at: https://www.cebm.net/covid-19/activities-delivered-at-home-by-family-carers-to-maintain-cognitive-function-in-people-with-dementia-socially-isolating-during-covid-19-evidence-for-non-technology-based-activities-interventions/
Cochrane Reviews
None this issue.

NICE
No this issue.

Uncover (University of Edinburgh)
Theodoro, E. et al. What is the evidence for transmission of COVID-19 by children [or in schools]? Uncover, 7th May 2020. [online].
There is very limited evidence of paediatric cases as a source of infection, which highlights the importance of obtaining robust data on this. Preliminary results from large targeted, population and school studies show that children (especially younger children) are less likely to be infected or infect others, but other studies show a similar viral load in children as in adults. Also, faecal-oral transmission appears to be risk of transmission by infected children, given the observed faecal shedding time, which may have substantial implications for community spread in day-care centres, schools, and homes. Rapid Review. Transmission. Freely available at: https://www.ed.ac.uk/files/atoms/files/uncover_001-03_summary_children_transmission_of_sars-cov-2.pdf

UpToDate
This topic will address the management of patients with COVID-19 (presumed and confirmed) in the outpatient setting, including self-care advice, telehealth, outpatient clinic management, and emergency department (ED) referral. It is important to note that there are limited data informing outpatient management strategies, and the approach described here is based upon our clinical experience; clinicians should take into the account the individual patient’s clinical and social circumstances as well as the available resources. Synthesis of Current Practice. Freely available at: https://www.uptodate.com/contents/coronavirus-disease-2019-covid-19-outpatient-management-in-adults?search=covid19&source=search_result&selectedTitle=3~150&usage_type=default&display_rank=3


London, M. J. Coronavirus disease 2019 (COVID-19): anesthetic concerns, including airway management and infection control. UpToDate, 28th April 2020. [Online]. The novel coronavirus disease 2019 (COVID-19 or nCoV) and other respiratory infectious agents can be transmitted to clinicians involved in their care, particularly during aerosol-generating procedures (eg, endotracheal intubation and extubation). Infection control to limit transmission is


World Health Organisation

World Health Organisation. COVID-19 and violence against women; what the health sector/system can do. WHO, 7th April 2020. Violence against women remains a major global public health and women’s health threat during emergencies. This short document provides some key information about what the health sector and individuals can do during to prevent and address violence against women during the COVID-19 pandemic


World Health Organisation. Update on WHO Solidarity Trial: accelerating a safe and effective COVID-19 vaccine. WHO, 5th May 2020. [Online]. The availability of a safe and effective vaccine for COVID-19 is well-recognized as an additional tool to contribute to the control of the pandemic. At the same time, the challenges and efforts needed to rapidly develop, evaluate and produce this at scale are enormous. It is vital that we evaluate as many vaccines as possible as we cannot predict how many will turn out to be viable. To increase the chances of success (given the high level of attrition during vaccine development), we must test all candidate vaccines until they fail. WHO is working to ensure that all of them have the chance of being tested at the initial stage of development. This is a major and extraordinary global research undertaking: WHO is facilitating collaboration and accelerated efforts on a scale not seen before; it is convening vital communications across the research community and beyond. Clinical Trial. Freely available at: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/global-research-on-novel-coronavirus-2019-ncov/solidarity-trial-accelerating-a-safe-and-effective-covid-19-vaccine

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8
Original Research

About Covid-19


The main aim of this systematic review is to provide a comprehensive clinical summary of all the available data from high-quality research articles relevant to the epidemiology, demographics, trends in hospitalization and outcomes, clinical signs and symptoms, diagnostic methods and treatment methods of COVID-19, thus increasing awareness in health care providers. We also discussed various preventive measures to combat COVID-19 effectively. A systematic and protocol-driven approach is needed to contain this disease. Review. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7188368/


This article summarized the understanding of the etiology, pathogenesis, epidemiology, clinical characteristics, diagnosis, treatment, rehabilitation, and prevention and control measures of COVID-19 based on the available data and anti-epidemic experience in China. Evidence Based Guideline. Freely available at: https://journals.lww.com/cmj/Abstract/9000/Guidance_for_the_management_of_adult_patients_with.99284.aspx


The last two decades have witnessed two large-scale pandemics caused by coronaviruses, including severe acute respiratory syndrome (SARS) and the Middle East respiratory syndrome (MERS). At the end of 2019, another novel coronavirus, designated as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), hit Wuhan, a city in the center of China, and subsequently spread rapidly to the whole world. Latest reports revealed that more than 800 thousand people in over 200 countries are involved in the epidemic disease by SARS-CoV-2. Due to the high mortality rate and the lack of optimum therapeutics, it is crucial to understand the biological characteristics of the virus and its possible pathogenesis to respond to the SARS-CoV-2. Rapid diagnostics and effective therapeutics are also important interventions for the management of infection control. However, the rapid evolution of SARS-CoV-2 exerted tremendous challenges on its diagnostics and therapeutics. Therefore, there is an urgent need to summarize the existing research results to guide decision-making on the prioritization of resources for research and development. In this review, we focus on our current understanding of epidemiology, pathogenesis, diagnostics and therapeutics of coronavirus disease 2019 (COVID-19). Review. Freely available at: https://www.europeanreview.org/wp/wp-content/uploads/4597-4606.pdf

Business as Usual Post Covid-19


This document provides a list of principles, recommendations and key considerations in order to facilitate elective surgery. These can be used in combination with national, specialty and local trust recovery plans. Guidance. Freely available at: https://www.rcseng.ac.uk/coronavirus/recovery-of-surgical-services/

Cancer and Haematology Services


Because of the increased risk in cancer patients of developing complications caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), physicians have to balance the competing risks of the negative impact of the pandemic and the primary tumor. In this consensus statement, an international group of experts present mitigation


In this comprehensive review, the authors discuss the impact of COVID-19 on health and the immune system of those affected, reviewing the latest treatment approaches and ongoing clinical trials. Additionally, they discuss challenges faced while treating cancer patients and propose potential approaches to manage this vulnerable population during this pandemic. Review. Freely available at: https://link.springer.com/content/pdf/10.1007/s11912-020-00934-7.pdf


At the Seattle Cancer Care Alliance, the primary oncology clinic for the University of Washington/Fred Hutchinson Cancer Consortium, our specialists who manage adult patients with hematologic malignancies have rapidly adjusted clinical practices to mitigate the potential risks of COVID-19 to our patients. We suggest that our general management decisions and modifications in Seattle are broadly applicable to patients with hematologic malignancies. Despite a rapidly changing environment that necessitates opinion-based care, we provide recommendations that are based on best available data from clinical trials and collective knowledge of disease states. Evidence Based Guideline. Freely available at: https://ascopubs.org/doi/10.1200/OP.20.00241

Cardiology and Cardiothoracic Services


While the focus of the medical community is on the management of COVID-19 and its associated complex presentations, it is critical to recognize that patients will continue to present with other medical problems that require urgent therapeutic interventions. There is growing concern that such interventions might have an impact on the natural history of COVID-19. We present a case of a patient who presented with unstable angina and multivessel coronary artery disease for which coronary artery bypass surgery was indicated and performed. Unfortunately, he succumbed to respiratory complications attributed to COVID-19. Our experience suggests concern about adverse outcomes in patients undergoing cardiac surgery who might be infected with COVID-19. Clearly, additional investigations and experience are needed. Case Report. Freely available at: https://journal.hsforum.com/index.php/HSF/article/view/3011/4701


In this article, the authors review the evidence on the relationship between the renin-angiotensin-aldosterone system and COVID-19 infection. In agreement with current guidelines, patients with hypertension should continue taking antihypertensive medications as prescribed without interruption. Because ACEIs and ARBs are also used to retard the progression of chronic kidney disease, they suggest that these recommendations also apply to the use of these agents in chronic kidney disease. No differences generally exist between ARBs and ACEIs in terms of efficacy in decreasing blood pressure and improving other outcomes, such as all-cause mortality, cardiovascular mortality, myocardial infarction, heart failure, stroke, and end-stage renal disease. The ACEIs are associated with cough secondary to accumulation of bradykinin and angioedema, and withdrawal rates due to adverse events are lower with ARBs. Given their equal efficacy but fewer adverse events, ARBs could potentially be a more favorable treatment option in patients with COVID-19 at higher risk for severe forms of disease. Review. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7129862/


Intra-operative aerosol generating procedures are arguably unavoidable in the routine provision of thoracic anaesthesia. Airway management for such patients during the COVID-19 pandemic including tracheal intubation, lung isolation, one-lung ventilation and flexible bronchoscopy may pose a significant risk to healthcare professionals and
patients. That said, there remains a need for timely thoracic surgery for patients with lung cancer or thoracic trauma. The thoracic anaesthetic community has been confronted with the need to modify existing techniques to maximise safety for patients and healthcare professionals. With appropriate modification, aerosol generation may be mitigated against in most circumstances. We developed a set of practice-based recommendations for airway management in thoracic surgical patients, which have been endorsed by the Association for Cardiothoracic Anaesthesia and Critical Care and the Society for Cardiothoracic Surgery in Great Britain and Ireland. Evidence Based Guideline. Abstract only. Please contact the library for full text.

Co-Morbidities


Rheumatology teams care for patients with diverse, systemic autoimmune diseases who are often immunosuppressed and at high risk of infections. The current COVID-19 pandemic has presented particular challenges in caring for and managing this patient group. The office of the chief medical officer (CMO) for England contacted the rheumatology community to provide expert advice on the identification of extremely vulnerable patients at very high risk during the COVID-19 pandemic who should be ‘shielded’. This involves the patients being asked to strictly self-isolate for at least 12 weeks with additional funded support provided for them to remain at home. A group of rheumatologists (the authors) have devised a pragmatic guide to identifying the very highest risk group using a rapidly developed scoring system which went live simultaneously with the Government announcement on shielding and was cascaded to all rheumatologists working in England. Guidance. Freely available at: https://www.rcpjournals.org/content/clinmedicine/early/2020/05/05/clinmed.2020-0149


The recent outbreak of COVID-19 has been rapidly spreading on a global scale. To date, there is no specific vaccine against the causative virus, SARS-CoV-2, nor is there an effective medicine for treating COVID-19, thus raising concerns with respect to the effect of risk factors such as clinical course and pathophysiological parameters on disease severity and outcome in patients with COVID-19. By extracting and analyzing all available published clinical data, we identified several major clinical characteristics associated with increased disease severity and mortality among patients with COVID-19. Specifically, preexisting chronic conditions such as hypertension, cardiovascular disease, chronic kidney disease, and diabetes are strongly associated with an increased risk of developing severe COVID-19; surprisingly, however, we found no correlation between chronic liver disease and increased disease severity. In addition, we found that both acute cardiac injury and acute kidney injury are highly correlated with an increased risk of COVID-19-related mortality. Given the high risk of comorbidity and the high mortality rate associated with tissue damage, organ function should be monitored closely in patients diagnosed with COVID-19, and this approach should be included when establishing new guidelines for managing these high-risk patients. Moreover, additional clinical data are needed in order to determine whether a supportive therapy can help mitigate the development of severe, potentially fatal complications, and further studies are needed to identify the pathophysiology and the mechanism underlying this novel coronavirus-associated infectious disease. Taken together, these findings provide new insights regarding clinical strategies for improving the management and outcome of patients with COVID-19. Systematic Review. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7187729/

Containment, Transmission and Isolation


Epidemic growth of COVID-19 was not associated with geographic latitude, nor with temperature during the exposure period, in our global analysis. Only area-wide public health interventions were consistently associated with reduced epidemic growth, and the greater the number of co-occurring public health interventions, the larger the reduction in growth. Taken together, these findings suggest that seasonality is likely to play only a minor role in the epidemiology of COVID-19, while public health interventions (school closures, restricting mass gatherings, social distancing) appear to have a major impact. The important effect of public health interventions needs to be weighed carefully against
potential economic and psychosocial harms when deciding when and how to lift restrictions. **Cohort Study.** Freely available at: https://www.cmaj.ca/content/cmaj/early/2020/05/08/cmaj.200920.full.pdf

**Diagnosis and Testing**

Buck, D. **Testing times: the government’s approach to Covid-19 testing.** King’s Fund, 1st May 2020. [Online]. Testing and appropriate action on the results of tests are critical to keeping people safe, understanding this pandemic, and bringing and keeping it under control. However, the current testing strategy (including how it compares with other countries) needs to be constantly scrutinised so it can be adapted if necessary, and lessons learnt during this pandemic can guide future responses to this and future epidemics and pandemics. **Report.** Freely available at: https://www.kingsfund.org.uk/publications/governments-approach-covid-19-testing

Convissary, D. et al. **Application of lung ultrasound during the coronavirus disease 2019 pandemic: a narrative review.** Anesthesia and Analgesia, 4th May 2020. [Online]. Amid the recent coronavirus disease (COVID-19) outbreak and resulting pandemic, there has been a growing necessity to determine novel ways of safely evaluating patients who are suspected to be infected with the virus. Given the limited supply, cost, and often slow turnaround time of available assays, testing every patient who presents with symptoms or with recent exposure is currently not a viable option. It has been cited that early computed tomography scanning of patients may be beneficial, because infected patients may demonstrate radiologic findings before the onset of severe clinical symptoms. However, the American College of Radiology recommends that computed tomography not be used to screen for or diagnose COVID-19 and that it be used sparingly in hospitalized, symptomatic patients given the risk of infection transmission posed to staff and subsequent patients. **Review.** Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7202122/

Hu, L. and Wang, C. **Radiological role in the detection, diagnosis and monitoring for the coronavirus disease 2019 (COVID-19).** European Review for Medical and Pharmacological Services, 24 (8) 2020, pp. 4523-4528. [Online]. Radiological examinations, especially computed tomography (CT), play an important role in the fight against COVID-19. A comprehensive and timely review of radiological role in the fight against COVID-19 remains urgent and mandatory. Hence, the aim of this review is to summarize the radiological role in the fight against COVID-19. This review of current studies on COVID-19 provides insight into the radiological role in the detection, diagnosis, and monitoring for COVID-19. The typical radiological features of COVID-19 include bilateral, multifocal, and multilobar ground glass opacification with patchy consolidation, a peripheral/subpleural or posterior distribution (or both), mainly in the lower lobes. A combination of chest CT and repeat Reverse Transcription-Polymerase Chain Reaction (RT-PCR) testing may be beneficial for the diagnosis of COVID-19 in the setting of strongly clinical suspicion. Chest CT may improve the sensitivity for COVID-19 diagnosis, but patients’ exposure to radiation should be kept as low as possible especially for children and pregnant women patients. **Review.** Freely available at: https://www.europeanreview.org/article/21035

Mehta, N. et al. **Association of use of angiotensin-converting enzyme inhibitors and angiotensin II receptor blockers with testing positive for coronavirus disease 2019 (COVID-19).** JAMA Cardiology, 5th May 2020. [Epub ahead of print]. In this study of the associations of ACEI and ARB use with COVID-19 test positivity, the frequency of positive test results was not significantly different in patients taking either ACEIs or ARBs at the time of testing. ACEIs and ARBs are important medications in the management of coronary artery disease, heart failure, diabetes, and hypertension. As there may be a risk to withdrawing these agents, our study, showing no significant greater susceptibility with regard to test positivity, supports the recommendations of several professional societies that have recommended continuation of these medications. Results of the secondary analyses of association of ACEI or ARB use and markers of clinical disease severity, including hospital admission, ICU admission, or mechanical ventilation requirement, require replication and reanalysis in larger numbers of patients later in the course of the current COVID-19 pandemic. **Freely available at:** https://onlinelibrary.wiley.com/doi/full/10.1002/jca.28734


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There is limited data on the analytical performance of commercial nucleic acid tests (NATs) for laboratory confirmation of COVID-19 infection. The AusDiagnostics assay is not specific for the detection SARS-CoV-2. Any positive results should be confirmed using another NAT or sequencing. The case definition used to investigate persons with suspected COVID-19 infection is not specific. Review. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7195305/


Fast and widespread diagnosis is crucial to fight against the outbreak of COVID-19. The present work surveys the landscape of available and emerging biosensor technologies for COVID-19 testing. Molecular diagnostic assays based on quantitative Reverse Transcription Polymerase Chain Reaction are used in most clinical laboratories. The COVID-19 pandemic has overwhelmed the testing capacity and motivated the development of fast point-of-care tests and the adoption of isothermal DNA amplification. Antigenic and serological rapid tests based on lateral flow immunoassays suffer from low sensitivity. Advanced digital systems enhance the performance at the expense of speed and large equipment requirement. Emerging technologies, including CRISPR gene-editing tools, benefit from high sensitivity and selectivity of molecular diagnostics and the easy use of lateral flow assays. DNA sequencing and sample pooling strategies are highlighted to bring out the full capacity of the available biosensor technologies and accelerate mass testing. Review. Freely available at: https://chemistry-europe.onlinelibrary.wiley.com/doi/epdf/10.11002/cbic.202000250

Elderly Care

See also Post Discharge and Rehabilitation


COVID-19 continues to impact older adults disproportionately, from severe illness and hospitalization to increased mortality risk. Concurrently, concerns about potential shortages of healthcare professionals and health supplies to address these needs have focused attention on how resources are ultimately allocated and used. Some strategies misguidedly use age as an arbitrary criterion, which inappropriately disfavors older adults. This statement represents the official policy position of the American Geriatrics Society (AGS). It is intended to inform stakeholders including hospitals, health systems, and policymakers about ethical considerations to consider when developing strategies for allocating scarce resources during an emergency involving older adults. Members of the AGS Ethics Committee collaborated with interprofessional experts in ethics, law, nursing, and medicine (including geriatrics, palliative care, emergency medicine, and pulmonology/critical care) to conduct a structured literature review and examine relevant reports. The resulting recommendations defend a particular view of distributive justice that maximizes relevant clinical factors and de-emphasizes or eliminates factors placing arbitrary, disproportionate weight on advanced age. The AGS positions include: (1) avoiding age per se as a means for excluding anyone from care; (2) assessing comorbidities and considering the disparate impact of social determinants of health; (3) encouraging decision makers to focus primarily on potential short-term (not long-term) outcomes; (4) avoiding ancillary criteria such as “life-years saved” and “long-term predicted life expectancy” that might disadvantage older people; (5) forming and staffing triage committees tasked with allocating scarce resources; (6) developing institutional resource allocation strategies that are transparent and applied uniformly; and (7) facilitating appropriate advance care planning. The statement includes recommendations that should be immediately implemented to address resource allocation strategies during COVID-19, aligning with AGS positions. The statement also includes recommendations for post-pandemic review. Such review would support revised strategies to ensure that governments and institutions have equitable emergency resource allocation strategies, avoid future discriminatory language and practice, and have appropriate guidance to develop national frameworks for emergent resource allocation decisions. Evidence Based Guideline. Freely available at: https://onlinelibrary.wiley.com/doi/epdf/10.1111/jgs.16537

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Endocrine and Diabetes


The authors provide guidance on prevention of adrenal crisis during the global COVID-19 crisis, which exposes patients with adrenal insufficiency to an increased risk of acute COVID-19 infection while at the same time restricting access to healthcare due to capacity issues. They highlight the need for education (sick day rules, stringent social distancing rules), equipment (sufficient glucocorticoid supplies, steroid emergency self-injection kit) and empowerment (steroid emergency card, COVID-19 guidelines) to prevent adrenal crises. In patients with adrenal insufficiency developing an acute COVID-19 infection, which frequently presents with continuous high fever, they suggest oral stress dose cover with 20mg hydrocortisone every six hours. They also comment on suggested dosing for patients who usually take modified release hydrocortisone or prednisolone. In patients with clinical insufficiency showing clinical deterioration during an acute COVID-19 infection, we advise immediate (self-)injection of 100mg hydrocortisone intramuscularly, followed by continuous intravenous infusion of 200mg hydrocortisone per 24 hours, or until this can be established, administration of 50mg hydrocortisone every 6 hours. *Evidence Based Guideline*. Freely available at: https://eje.bioscientifica.com/view/journals/eje/aop/eje-20-0361/eje-20-0361.xml


COVID-19 has changed the nature of medical consultations, emphasizing virtual patient counseling, with relevance for patients with diabetes insipidus (DI) or hyponatraemia. The principles of management outlined in international guidelines still form the basis of management during COVID-19. The main complication of desmopressin treatment in DI is dilutional hyponatraemia. Since plasma sodium monitoring is not always possible in times of COVID-19, we recommend to delay the desmopressin dose once a week until aquaresis occurs allowing excess retained water to be excreted. Patients should measure their body weight daily. Patients with DI admitted to the hospital with COVID-19 have a high risk for mortality due to volume depletion. Endocrinologists must supervise the fluid replacement and dosing of desmopressin. Patients after pituitary surgery should only drink to thirst and measure their body weight daily to early recognize the development of postoperative SIAD. They should know hyponatraemia symptoms. Hyponatraemia is common in patients with pneumonia, but it is unclear if it is only a marker of disease severity or if its correction improves outcomes. Its prevalence in patients with pneumonia due to COVID-19 is not yet known, but seems to be low. In contrast, hypernatraemia may develop in COVID-19 patients in ICU most probably due to insensible water losses from pyrexia, increased respiration rate and use of diuretics. Hypernatraemic dehydration may contribute to the high rate of acute kidney injury in COVID-19. IV fluid replacement should be administered with caution in severe cases of COVID-19 because of the risk of pulmonary oedema. *Evidence Based Guideline*. Freely available at: https://eje.bioscientifica.com/view/journals/eje/aop/eje-20-0338/eje-20-0338.xml


Patients with pituitary tumours, ensuing hormonal abnormalities and mass effects are usually followed in multidisciplinary pituitary clinics and can represent a management challenge even during times of non-pandemic. The COVID-19 pandemic has put on hold routine medical care for hundreds of millions of patients around the globe, while many pituitary patients’ evaluations cannot be delayed for too long. Furthermore, the majority of patients with pituitary tumours have co-morbidities potentially impacting the course and management of COVID-19 (e.g. hypopituitarism, diabetes mellitus, hypertension, obesity, cardiovascular disease). Here, we summarize some of the diagnostic and management dilemmas for these patients, and we provide guidance on safe and as effective as possible delivery of care in the COVID-19 era. We also attempt to address how pituitary services should be remodelled in the event of similar crises, while maintaining or even improving patient outcomes. Regular review of these recommendations and further adjustments are needed, depending on the evolution of the COVID-19 pandemic status. We consider that utilization of successful models of pituitary multidisciplinary care implemented during the COVID-19 pandemic should

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continue after the crisis is over by using the valuable and exceptional experience gained during these challenging times. **Evidence Based Guideline.** Freely available at: https://eje.bioscientifica.com/view/journals/eje/20-0473/eje-20-0473.xml


Clinical evaluation should guide those needing investigation. Strict adherence to COVID-19 protection measures is necessary. Alternative ways of consultations (telephone, video) should be used. Early discussion with regional/national experts about investigation and management of potential and existing patients is strongly encouraged. Patients with moderate and severe clinical features need urgent investigation and management. Patients with active Cushing’s syndrome, especially when severe, are immunocompromised and social shielding is recommended. In patients with mild features or in whom a diagnosis is less likely, clinical re-evaluation should be repeated at three and six months or deferred until the prevalence of SARS-CoV-2 has significantly decreased. Diagnostic pathways may need to be very different from usual recommendations in order to reduce investigations. When extensive differential diagnostic testing is not feasible, it should be deferred, and medical treatment should be initiated. Transsphenoidal pituitary surgery may be avoided during high SARS-CoV-2 viral prevalence. Medical management rather than surgery will be used for most patients since the short- to mid-term prognosis depends in most cases on hypercortisolism rather than its cause; it should be initiated promptly to minimize the risk of infection in these immunosuppressed patients. **Evidence Based Guidance.** Freely available at: https://eje.bioscientifica.com/view/journals/eje/20-0352/eje-20-0352.xml


Based on the data that have been amassed so far, the primary risk factors for a severe disease course or even mortality from COVID-19 are underlying diseases such as diabetes and hypertension. As the global prevalence of diabetes continues to increase, patients with endocrine diseases such as diabetes mellitus and those who are on long-term corticosteroid therapy due to adrenal insufficiency or hypopituitarism are at risk for a poor prognosis of COVID-19. As endocrinologists, we would like to briefly review the current knowledge about the relationship between COVID-19 and endocrine diseases and to discuss what we can do for the safety and health of our patients with endocrine diseases in this globally threatening situation. **Review.** Freely available at: https://e-enm.org/DOIx.php?id=10.3803/EnM.2020.35.e1


The National Diabetes Stakeholders Covid-19 Response Group was formed in early April 2020 as a rapid action by the Joint British Diabetes Societies for Inpatient Care, Diabetes UK, the Association of British Clinical Diabetologists, and Diabetes Frail to address and support the special needs of residents with diabetes in UK care homes during Covid-19. It was becoming obvious that the care home sector was becoming a second wave of Covid-19 infection and that those with diabetes residing in care homes were at increased risk not only of susceptibility to infection but also to poorer outcomes. Its key purposes included minimising the morbidity and mortality associated with Covid-19 and assisting care staff to identify those residents with diabetes at highest risk of Covid-19 infection. The guidance was particularly created for care home managers, other care home staff, and specialist and non-specialist community nursing teams. The guidance covers the management of hyperglycaemia by discussion of various clinical scenarios that could arise, the management of hypoglycaemia, foot care and end of life care. In addition, it outlines the conditions where hospital admission is required. The guidance should be regarded as interim and will be updated as further medical and scientific evidence becomes available. **Evidence Based Guideline.** Freely available at: https://onlinelibrary.wiley.com/doi/abs/10.1111/dme.14317

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Gastroenterology


The massive inflow of patients with COVID-19 requiring urgent care has overloaded hospitals in France and impacts the management of other patients. Deferring hospitalization and non-urgent surgeries has become a priority for surgeons today in order to relieve the health care system. It is obviously not simple to reduce emergency surgery without altering the quality of care or leading to a loss of chance for the patient. Acute appendicitis is a very specific situation and the prevalence of this disease leads us to reconsider this particular disease in the context of the COVID-19 crisis. Indeed, while the currently recommended treatment for uncomplicated acute appendicitis is surgical appendectomy, the non-surgical alternative of medical management by antibiotic therapy alone has been widely evaluated by high-quality studies in the literature. Insofar as the main limitation of exclusively medical treatment of uncomplicated acute appendicitis is the risk of recurrent appendicitis, this treatment option represents an alternative of choice to reduce the intra-hospital overload in this context of health crisis. The aim of this work is therefore to provide physicians and surgeons with a practical guide based on a review of the literature on the medical treatment of uncomplicated acute appendicitis in adults, to offer this alternative treatment to the right patients and under good conditions, especially when access to the operating room is limited or impossible. Evidence Based Guideline. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7181971/


This is a rapid review of the risk of infection with SARS-CoV-2, the risk of symptomatic cases of COVID-19, and the severity of these cases in IBD patients. Guidance on how to manage IBD patients at risk for infection, and IBD patients after infection is provided. The prevention of infection in both patients and health care providers by reducing elective visits and procedures, utilizing telemedicine, and social isolation is also emphasized to maintain health care services for IBD patients during a growing pandemic. Evidence Based Guideline. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7184434/


COVID-19 is rapidly spreading worldwide and specific literature how to deal with IBD patients is limited so far. Here, the World Endoscopy Organisation (WEO) is providing practical advice for the management of IBD patients during the pandemic covering the diagnostic and therapeutic spectrum. Evidence Based Guideline. Freely available at: https://onlinelibrary.wiley.com/doi/epdf/10.1111/den.13712


Coronavirus disease 2019 (COVID-19), which started in December 2019 in China, has resulted in a pandemic leading to significant morbidity and mortality across the globe. Although it mainly causes respiratory symptoms, respiratory failure and death due to multiorgan failure, there is evolving evidence to suggest gastrointestinal (GI) and liver involvement by this virus. Owing to this, health-care professionals taking care of GI and liver diseases are also at an increased risk of getting exposed. Hence, there is a need for protocols to be prepared to guide the handling of COVID-19 patients by the GI and liver specialists, as well as to manage the pre-existing GI and liver diseases during the ongoing pandemic. We present here the guidelines prepared jointly by the three Indian professional bodies in the field of GI diseases, namely the Society of Gastrointestinal Endoscopy of India, Indian Society of Gastroenterology, and Indian National Association for the Study of the Liver. Evidence Based Guideline. Freely available at: https://www.jcehepatology.com/article/S0973-6883(20)30028-1/pdf
Head and Neck Services


Epistaxis is a common complaint in the general population, and its treatment is a common procedure in emergency departments. In the COVID-19 era, procedures involving airway management are a particular risk for health care workers due to the high virulence of the virus, the transmission through aerosol, and the risk of contagion from asymptomatic patients. In this article, we propose a simple memorandum of clinical recommendations to minimize the risk of operator infection deriving from epistaxis management. The correct use of personal protective equipment and strict compliance with the behavioral guidelines are essential to reduce the potential risk of infection. In particular, the use of filtering masks is strongly recommended since all patients, including those referring for epistaxis, should be treated as being COVID-19 positive in the emergency department. The safety of health care workers is essential not only to safeguard continuous patient care but also to limit virus transmission. **Evidence Base Guideline.** Freely available at: [https://journals.sagepub.com/doi/full/10.1177/0194599820926497?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%200pubmed](https://journals.sagepub.com/doi/full/10.1177/0194599820926497?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%200pubmed)


This document provides guidance on how to proceed with and adapt ENT surgery in the current pandemic context, as well as on the management of postponed operations. This best practice advice must of course be adapted in each region according to the development of the epidemic and pre-existing arrangements. Their local application can only be decided within the framework of collaboration between the ENT teams, the operational hygiene units and all the other specialties concerned. **Evidence Based Guideline.** Freely available at: [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7177055/pdf/main.pdf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7177055/pdf/main.pdf)

Dover, J. S. et al. **A path to resume aesthetic care: executive summary of project AesCert guidance supplement—practical considerations for aesthetic medicine professionals supporting clinic preparedness in response to the SARS-CoV-2 outbreak.** Facial Plastic Surgery and Aesthetic Medicine, 5th May 2020. [Epub ahead of print].

This Project AesCert Guidance Supplement (“Guidance Supplement”) was developed in partnership with a multidisciplinary panel of board-certified physician and doctoral experts in the fields of infectious disease, immunology, public-health policy, dermatology, facial plastic surgery, and plastic surgery. The Guidance Supplement is intended to provide aesthetic medicine physicians and their staff with a practical guide to safety considerations to support clinic preparedness for patients seeking nonsurgical aesthetic treatments and procedures following the return-to-work phase of the coronavirus disease 2019 (COVID-19) pandemic, once such activity is permitted by applicable law. Many federal, state, and local governmental authorities, public-health agencies, and professional medical societies have promulgated COVID-19 orders and advisories applicable to health-care practitioners. The Guidance Supplement is meant to provide aesthetic physicians and their staff with an additional set of practical considerations for delivering aesthetic care safely and generally conducting business responsibly in the new world of COVID-19. **Evidence Based Guideline.** Freely available at: [https://www.liebertpub.com/doi/10.1089/fpsam.2020.0239](https://www.liebertpub.com/doi/10.1089/fpsam.2020.0239)

Yang, Y. et al. **Experience of diagnosing and managing patients in oral maxillofacial surgery during the prevention and control period of the new coronavirus pneumonia.** Chinese Journal of Dental Research, 23 (1) 2020, pp.57-62. [Online].

As one of the busiest specialised hospitals in the world, the Department of Oral and Maxillofacial Surgery of Peking University School and Hospital of Stomatology summarised the experience with disease prevention and control and clinical recommendations on the examination, diagnosis and treatment processes, clinical management, healthcare personnel protection and disinfection amid the continued spread of the pandemic. **Evidence Based Guideline.** Freely available at: [https://cjdr.quintessenz.de/cjdr_2020_01_s0057.pdf](https://cjdr.quintessenz.de/cjdr_2020_01_s0057.pdf)

Zimmermann, M. and Nkenke, E. **Approaches to the management of patients in oral and maxillofacial surgery during COVID-19 pandemic.** Journal of Cranio-Maxillo-Facial Surgery, 48 (5), pp. 521-526. [Online]. Oral and maxillofacial surgery is correlated with a high risk of SARS-CoV-2 transmission. Therefore, the aim of the review is to collect and discuss aspects of the management of patients in oral and maxillofacial surgery during the COVID-19 pandemic. It concludes that in order to address the COVID-19 challenge adequately, significant changes in the infrastructure of outpatient units, inpatient units, and operating rooms are needed. In addition, the demands

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concerning personal protective equipment increase significantly. The major aim is to protect patients as well as the medical staff from unnecessary infection, and to keep the healthcare system running effectively. Therefore, every effort should be taken to make the necessary investments. Review. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7128256/

Infection Control and PPE

This advisory guide has been prepared to avoid infection risk in NM clinics. During the COVID-19 outbreak, staff must use proper personal protective equipment and patients should be evaluated as the elective case according to clinical status. A questionnaire should be made for COVID-19. In cancer cases requiring urgent treatment, radionuclide treatment (RNT) should be planned according to the COVID-19 test result. If the result is negative, RNT can be applied; but if not or if the symptoms are present, RNT must be postponed. Following imaging procedures, scanners and room surfaces should be cleaned by personnel with proper disinfection training. Evidence Based Guideline. Freely available at: http://cms.galenos.com.tr/Uploads/Article_38364/MIRT-29-49-En.pdf

Current best practices for personal protective equipment (PPE) during this time are rapidly evolving and fluid due to the novel and acute nature of the pandemic and the dearth of high-level evidence. Routine infection control practices augmented by airborne precautions are paramount when treating the COVID-19 positive patient. Best practices for PPE use in patients who have unknown COVID-19 status are a highly charged and emotional issue. The variables to be considered include protection of patients and healthcare providers, accuracy and availability of testing, and responsible use of PPE resources. This article also explores the concerns of surgeons regarding possible transmission to their own family members as a result of caring for COVID-19 patients. Evidence Based Guideline. Freely available at : https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7169903/

Given the severity and clinical uncertainty of patients with COVID-19 and the increased risk of transmission to clinicians, careful consideration should be taken prior to performing tracheostomy. If tracheostomy is performed, we recommend a bedside approach to limit exposure time and number of exposed personnel. Bronchoscopy use with a percutaneous approach should be limited in order to decrease viral exposure. Thorough preprocedural planning, use of experienced personnel, enhanced personal protective equipment where available, and a thoughtful anesthesia approach are instrumental in maximizing positive patient outcomes while successfully protecting the safety of healthcare personnel. Review. Freely available at: https://onlinelibrary.wiley.com/doi/full/10.1002/lary.28734

Intensive and Critical Care

Anandaciva, S. Critical care services in the English NHS. King’s Fund, 7th April 2020. [Online].
The national focus on critical care services in England is increasing because of Covid-19 (coronavirus). Emerging international and domestic data suggests a significant proportion of hospitalised patients with coronavirus require help with breathing, including mechanical ventilation, and other services critical care staff and units provide. This briefing brings together information on critical care services in England to highlight the important role these services play. Overview. Freely available at: https://www.kingsfund.org.uk/publications/critical-care-services-nhs

Despite anticoagulation, a high number of patients with ARDS secondary to COVID-19 developed life-threatening thrombotic complications. Higher anticoagulation targets than in usual critically ill patients should therefore probably be suggested. Cohort Study. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7197634/
Parry, R., Pattison, N. and Mannix, K. How to have urgent conversations about withdrawing and withholding life-sustaining treatments in critical care – including phone and video calls. Faculty of Intensive Care Medicine, April 2020. [Online]. This rapidly produced guidance encompasses urgent phone or video call conversations about withholding, or withdrawing life-sustaining treatments in critical care, in the context of the COVID-19 pandemic, between professionals and people close to the patient – usually family members. This guide is based on existing best practice guidance and research. Evidence Based Guideline. Freely available at: https://www.ficm.ac.uk/sites/default/files/how_to_have_urgent_conversations_about_withdrawing_and_withholding_life-sustaining_treatments_in_critical_care.pdf


Price, S. et al. Respiratory management in severe acute respiratory syndrome coronavirus 2 infection. European Heart Journal Acute Cardiovascular Care, 7th May 2020. [Epub ahead of print]. The severe acute respiratory syndrome coronavirus 2 pandemic is to date affecting more than a million of patients and is challenging healthcare professionals around the world. Coronavirus disease 2019 may present with a wide range of clinical spectrum and severity, including severe interstitial pneumonia with high prevalence of hypoxic respiratory failure requiring intensive care admission. There has been increasing sharing experience regarding the patient’s clinical features over the last weeks which has underlined the need for general guidance on treatment strategies. We summarise the evidence existing in the literature of oxygen and positive pressure treatments in patients at different stages of respiratory failure and over the course of the disease, including environment and ethical issues related to the ongoing coronavirus disease 2019 infection. Review. Freely available at: https://journals.sagepub.com/doi/pdf/10.1177/2048872620924613

Tume, L. N., Trapani, J. and Walker, W. Has Covid-19 forced us to implement better practices? Nursing in Critical Care, 17th April 2020. [Online]. The Coronavirus pandemic (COVID-19) is the biggest challenge for critical care ever seen across the globe. Despite the varied governmental approaches and responses internationally, one thing is evident: all of us have been forced to think and work differently, in the effort to curb the spread of this catastrophic disease. This editorial will focus on critical care nursing and the impact of COVID-19 on the way we work. Editorial. Freely available at: https://onlinelibrary.wiley.com/doi/toc/10.1111/(ISSN)1478-5153.year-of-nurse-and-midwife

Winck, J. C. and Ambrosino, N. COVID-19 pandemic and non invasive respiratory management: every Goliath needs a David: an evidence based evaluation of problems. Pulmonology Journal, 27th April 2020. [Epub ahead of print]. All respiratory therapies represent a risk of aerosol generating procedures during the care of patients with COVID-19. Personal Protective Equipment and Environmental Control/Engineering should be the initial concern and consideration when managing patients with COVID-19. Given the current circumstances it is not likely that there will be randomized controlled trials to confirm which non invasive respiratory support is better to reduce the need for intubation in the context of COVID-19 pandemic. Manufacturers should be urged to create safer interfaces, viral proof circuitry and “new generation” non invasive ventilators with integration of different therapies, specific monitoring and necessary safety features. It is our impression, that this will be a marathon not a sprint, and like David we must beat Goliath. Review. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7183996/pdf/main.pdf
Liver and Hepatic Diseases


In patients infected with severe acute respiratory syndrome coronavirus 2, the respiratory symptoms, such as fever, cough and dyspnea, are the most frequent clinical manifestations. These patients may also present with less well-defined symptoms like diarrhea, nausea, vomiting and/or abdominal discomfort both at the time of diagnosis and during the clinical course. In a few cases, these symptoms may also present before the appearance of respiratory symptoms. To penetrate the body, Severe acute respiratory syndrome coronavirus 2 uses ACE2 receptors, which are present not only in respiratory epithelium but also in gastrointestinal mucosa and liver cholangiocytes. In several cases, viral RNA is detectable in the stool of patients with coronavirus disease 2019 (COVID-19). The liver damage seems to show a multifactorial origin. About 2%-11% of patients with COVID-19 have known underlying hepatic pathologies. In 14%-53% of COVID-19 cases, there is an alteration of the indices of liver cytolysis and is more frequently observed in severe forms of COVID-19, especially during hospitalization. In conclusion, hypertransaminasemia present in these patients may be due to several reasons. Further studies will be needed to understand the main cause of this phenomenon in order to guide the best treatment. Review. Freely available at: [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7190951/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7190951/)

Mental Health and Well-being


The lack of resources and coordination to face the coronavirus epidemic raises concerns for the health of patients with mental disorders in a country where we still have memories of the dramatic experience of famine in psychiatric hospitals during the Second World War. This article aims to propose guidance to ensure mental health care during the SARS-CoV epidemic in France. It concludes that French mental healthcare is now facing a great and urgent need for reorganization and must also prepare in the coming days and weeks to face an epidemic of emotional disorders due to the confinement of the general population. Review. Freely available at: [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7174154/pdf/main.pdf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7174154/pdf/main.pdf)


The author highlights the new OxCADAT guidance for psychotherapists providing online therapy for people with anxiety, panic or trauma. This blog also contains many ideas and an extensive list of useful research and resources for delivering internet based treatment for people during the COVID-19 pandemic. Guidance. Freely available at: [https://www.nationalelfservice.net/treatment/digital-health/online-therapy-during-covid-19/](https://www.nationalelfservice.net/treatment/digital-health/online-therapy-during-covid-19/)


This briefing explores the ideas of collective trauma and healing, and what the process of recovery may look like. *Briefing Paper.* Freely available at: [https://www.centreformentalhealth.org.uk/trauma-mental-health-and-coronavirus](https://www.centreformentalhealth.org.uk/trauma-mental-health-and-coronavirus)
Neurology and Stroke

The culmination of studies indicates a daunting clinical relationship between COVID-19 and secondary neurological complications and needs a concerted effort by neurologists to reorganize consultative practices to serve the neurological needs of patients during this pandemic. More sensitive data extraction measures and comprehensive clinical documentation are required to better understand the prevalence of neurological comorbidities and pre-existing neurological disorders in patients with COVID-19. Review. Freely available at: https://n.neurology.org/content/early/2020/04/24/WNL.0000000000009673.long

Coronavirus disease 2019 (COVID-19) has become a pandemic disease globally. Although COVID-19 directly invades lungs, it also involves the nervous system. Therefore, patients with nervous system involvement as the presenting symptoms in the early stage of infection may easily be misdiagnosed and their treatment delayed. They become silent contagious sources or ‘virus spreaders’. In order to help neurologists to better understand the occurrence, development and prognosis, we have developed this consensus of prevention and management of COVID-19. It can also assist other healthcare providers to be familiar with and recognise COVID-19 in their evaluation of patients in the clinic and hospital environment. Evidence Based Guideline. Freely available at: https://svn.bmj.com/content/early/2020/05/07/svn-2020-000382.long

This document with consensus is divided into 18 sections. A total of 41 conclusions and practice implications have been developed. The document includes practice implications for evaluation of stroke patients with caution for stroke team members to avoid COVID-19 exposure, during clinical evaluation and performance of imaging and laboratory procedures with special considerations of intravenous thrombolysis and mechanical thrombectomy in stroke patients with suspected or confirmed COVID-19 infection. These practice implications with consensus based on the currently available evidence aim to guide clinicians caring for adult patients with acute ischemic stroke who are suspected of, or confirmed, with COVID-19 infection. Under certain circumstances, however, only limited evidence is available to support these practice implications, suggesting an urgent need for establishing procedures for the management of stroke patients with suspected or confirmed COVID-19 infection. Evidence Based Guideline. Freely available at: https://journals.sagepub.com/doi/pdf/10.1177/1747493020923234

Obstetrics and Gynaecology

These 3 cases show that normal peripartum chest CT, in the presence of mild symptoms, does not preclude an abrupt postpartum decompensation. Awareness of the potential for this to occur may guide obstetric and midwifery teams to closely monitor women who tested positive for SARS-CoV-2 infection immediately after delivery, and for days after. Consideration might be given to delay discharge in women with SARS-CoV-2 infection who have recently given birth. Health care professionals, furthermore, should ensure that new mothers who are discharged from hospital are aware of how to seek medical attention if they experience symptoms of COVID-19 after giving birth. If hospital follow-up is not possible, follow-up in the community for both mother and baby, days after discharge, could be prioritized for patients with SARS-CoV-2 infection to ensure safety in the postnatal period. Case Report. Freely available at: https://www.cmaj.ca/content/cmaj/early/2020/05/06/cmaj.200553.full.pdf

The COVID-19 pandemic has stressed patients and healthcare givers alike and challenged our practice of antenatal care, including fetal diagnosis and therapy. This document aims to review relevant recent information to allow us to

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optimize prenatal care delivery. We discuss potential modifications to obstetric management and fetal procedures in SARS-CoV2-negative and SARS-CoV2-positive patients with fetal anomalies or disorders. Most fetal therapies are time sensitive and cannot be delayed. If personnel and resources are available, we should continue to offer procedures of proven benefit, acknowledging any fetal and maternal risks, including those to health care workers. There is, to date, minimal, unconfirmed evidence of spontaneous vertical transmission, though it may theoretically be increased with some procedures. Knowing a mother’s preoperative SARS-CoV-2 status would enable us to avoid or defer certain procedures while she is contagious and to protect health care workers appropriately. Some fetal conditions may alternatively be managed neonatally. Counseling regarding fetal interventions which have a possibility of additional intra- or postoperative morbidity must be performed in the context of local resource availability. Procedures of unproven benefit should not be offered. We encourage participation in registries and trials that may help us to understand the impact of COVID-19 on pregnant women, their fetuses, and neonates. Evidence Based Guideline. Freely available at: https://www.karger.com/Article/FullText/508254

The aim of this study was to review the current state of knowledge about SARS-CoV-2 infection and COVID-19 disease in pregnant women. Because the epidemic began in China, most of the available literature comes from studies conducted there. The studies used to prepare this review article are the first non-randomized studies containing small groups of examined women. They do not provide clear indications, but show that in an epidemic situation, special care should be taken in pregnancy management, making decisions about termination of pregnancy, and handling of the newborn baby to minimize the risk of subsequent health consequences. Further analysis is needed on the incidence of COVID-19 among pregnant women and its consequences. This will allow us to develop recommendations on how to deal with patients in the future in case of repeated epidemic emergencies. Review. Freely available at: https://www.medscimonit.com/download/index/idArt/924725

Ophthalmology

Within a short period, a growing body of articles has started to elucidate the ophthalmological implications of COVID-19. As the eye can represent a route of infection (actively via tears and passively via the nasoacral duct), ophthalmological care has to undergo substantial modifications during this pandemic. In the eye, COVID-19 can manifest as keratoconjunctivitis. Review. Freely available at: https://www.thieme-connect.com/products/ejournals/abstract/10.1055/a-1164-9381

Paediatric and Neonatal Services

None this issue.

Palliative and End of Life Care

See also CEBM

Deaths due to COVID-19 are associated with risk factors which can lead to prolonged grief disorder, post-traumatic stress and other poor bereavement outcomes among relatives, as well as moral injury and distress in frontline staff. Here we review relevant research evidence, and provide evidence-based recommendations and resources for hospital clinicians to mitigate poor bereavement outcomes and support staff. For relatives, bereavement risk factors include dying in an intensive care unit, severe breathlessness, patient isolation or restricted access, significant patient and family emotional distress, and disruption to relatives’ social support networks. Recommendations include advance care planning; proactive, sensitive and regular communication with family members alongside accurate information provision; enabling family members to say goodbye in person where possible; supporting virtual communication; providing excellent symptom management and emotional and spiritual support; and providing and/or sign-posting to bereavement services. To mitigate effects of this emotionally challenging work on staff, we recommend an
organisational and systemic approach which includes access to informal and professional support. Evidence Based Guideline. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7196538/

Patient Information


Post Discharge and Rehabilitation

Liu, K. et al. Respiratory rehabilitation in elderly patients with COVID-19: a randomized controlled study. Complementary Therapies in Clinical Practice, 39 (May) 2020, pp. 1-5. [On-line]. The purpose of this study was to investigate the effects of 6-week respiratory rehabilitation training on respiratory function, QoL, mobility and psychological function in elderly patients with COVID-19. After 6 weeks of respiratory rehabilitation in the intervention group, there disclosed significant differences in FEV1(L), FVC(L), FEV1/FVC%, DLCO% and 6-min walk test. The SF-36 scores, in 8 dimensions, were statistically significant within the intervention group and between the two groups. SAS and SDS scores in the intervention group decreased after the intervention, but only anxiety had significant statistical significance within and between the two groups. In conclusion, six-week respiratory rehabilitation can improve respiratory function, QoL and anxiety of elderly patients with COVID-19, but it has little significant improvement on depression in the elderly. Observational Study. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7118596/pdf/main.pdf

Primary Care Practice

Primary Care Contracting. COVID-19 Resources for primary care. PCC. 11th May 2020. [Online]. PCC is collecting locally produced plans and guidance for primary care organisations dealing with the Covid-19 crisis. They will update the pages and share any new material via their weekly newsletters. If you don’t already receive one of these, you can find details of how to sign-up on the page. Contents includes business continuity plans, guidance and useful resources. Web site. Freely available at: https://pcc-cic.org.uk/article/covid-19-resources-primary-care

Prognosis

Ihle-Hansen, H. et al. COVID-19: symptoms, course of illness and use of clinical scoring systems for the first 42 patients admitted to a Norwegian local hospital. Tidsskriftet de Nor Laegeforening, 140 (7) 2020. [Online]. In this observational qualitative study, all patients admitted to a Norwegian local hospital (Bærum Hospital) with proven COVID-19 infection were included consecutively from the start of the outbreak. We present here patient characteristics, symptoms, clinical findings, experience of using clinical scoring systems and course of illness based on data in medical records. Observational Study. Freely available at: https://tidsskriftet.no/en/2020/04/originalartikkel/covid-19-symptoms-course-illness-and-use-clinical-scoring-systems-first-42

Itelman, E. et al. Clinical Characterization of 162 COVID-19 Patients in Israel: Preliminary Report From a Large Tertiary Center. Israel Medical Association Journal, 22 (5) 2020, pp. 271-274. [Online]. Management of COVID-19 patients presents a novel challenge for caregivers and medical systems alike. At such times when new information was being generated on a daily basis and the scientific community as a whole was gathered in the struggle to halt this pandemic before it took countless more lives, we presented our findings and thoughts to assist other providers and institutions in their care for patients. Cohort Study. Freely available at: https://www ima.org.il/FilesUploadPublic/IMAJ/0/427/213657.pdf

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Jiang, M. et al. *T Cell subset counts in peripheral blood can be used as discriminatory biomarkers for diagnosis and severity prediction of COVID-19*. Journal of Infectious Diseases, 7th May 2020. [Epub ahead of print].

This study evaluated the significance of lymphocyte subsets detection in peripheral blood in the diagnosis and prognosis of coronavirus disease 2019 (COVID-19). The results revealed that CD3+T, CD4+T, CD8+T cells and NK cells were significantly decreased in COVID-19 patients. COVID-19 patients had a relatively slight decrease in CD4+T cells but a severe decrease of CD8+T cells. The significantly elevated CD4/CD8 ratio was observed in COVID-19 patients. T cell subset counts were related to the severity and prognosis of COVID-19. The counts of CD8+T and CD4+T cells can be used as diagnostic markers of COVID-19 and predictors of disease severity. Freely available at: https://academic.oup.com/jid/advance-article/doi/10.1093/infdis/jiaa252/5831863


CT quantification of pneumonia lesions can early and non-invasively predict the progression to severe illness, providing a promising prognostic indicator for clinical management of COVID-19. *Retrospective Cohort Study*. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7196293/


This report is one of the first studies to describe the characteristics and predictors of outcomes for hospitalised Covid-19 patients in the United Kingdom. It finds that older age, male sex and admission hypoxia, thrombocytopenia, renal failure, hypoalbuminaemia and raised bilirubin are associated with increased odds of death. Minority ethnic groups were over-represented in the cohort and, compared to white people, people of black ethnicity may be at increased odds of mortality. *Retrospective Cohort Study*. Freely available at: https://www.imperial.ac.uk/media/imperial-college/medicine/mrc-gida/2020-04-29-COVID19-Report-17.pdf

Renal and Urology


The coronavirus disease 2019 (COVID-19) pandemic is unlike anything seen before by modern science-based medicine. Health systems across the world are struggling to manage it. Added to this struggle are the effects of social confinement and isolation. This brings into question whether the latest guidelines are relevant in this crisis. We aim to support urologists in this difficult situation by providing tools that can facilitate decision making, and to minimise the impact and risks for both patients and health professionals delivering urological care, whenever possible. We hope that the revised recommendations will assist urologist surgeons across the globe to guide the management of urological conditions during the current COVID-19 pandemic. *Evidence Based Guideline*. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7183974/

Research and Trials

See also World Health Organisation.

Statistics and Mortality

See also CEBM and UK Government Reports.


In this cohort of patients with COVID-19, hypoxemia was independently associated with in-hospital mortality. These results may help guide the clinical management of patients with severe COVID-19, particularly in settings requiring strategic allocation of limited critical care resources. *Cohort Study*. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7151468/
Kronbichler, A. Seven recommendations to rescue the patients and reduce the mortality from COVID-19 infection: an immunological point of view. Autoimmunity Review, 3rd May 2020. [Epub ahead of print].

Now COVID-19 is causing a severe public health emergency and the mortality is rapidly increasing all over the world. In the current pandemic era, although there have been many efforts to diagnose a number of patients with symptoms or close contacts in the world to prevent the spread in the community, there is no definite guideline for the initial therapeutic approach for them and therefore, many patients have been dying due to a hyperinflammatory immunological reaction as "cytokine storm". Severe patients are hospitalized and the treatment is done, though they have not been established yet. Currently, however, no treatment is provided for those who are isolated at home or shelter until they get severe symptoms, which will increase the harms to the patients. In this review, we discuss some important points dedicated to the management of patients with COVID-19 infections, which should help reducing morbidity and mortality. In this era, we suggested 7 recommendations to rescue the patients and to reduce the morbidity and mortality due to COVID-19 based on immunological point of view. Review. Abstract only. Please contact the library for full text.

Surgery

See also Cardiology and Cardiothoracic Services


The COVID-19 global pandemic has resulted in a plethora of guidance and opinion from surgical societies. A controversial area concerns the safety of surgically created smoke and the perceived potential higher risk in laparoscopic surgery. There is not enough evidence to quantify the risks of COVID-19 transmission in surgical smoke. However, steps can be undertaken to manage the potential hazards. The advantages of minimally invasive surgery may not need to be sacrificed in the current crisis. Review. Freely available at: https://bjsjournals.onlinelibrary.wiley.com/doi/full/10.1002/bjs.11679


Ultimately, surgeons want to perform operations for their patients. Many feel their careers and livelihoods are threatened by the COVID-19 restrictions on hospital activity. Single-entry models and team-based care are the most equitable mechanisms for ensuring that all surgeons — regardless of gender, years in practice, or existing referral network — have an opportunity to provide care and maintain their skills by allocating them equal access to operating room time. These models of care are the most fair and patient-centred approach to addressing the profound challenges we are facing. Surgeons should join health system and hospital leaders and public policy-makers in adopting this approach as a surgery recovery plan in the immediate aftermath of the COVID-19 pandemic and seize this once-in-a-generation opportunity to kindle a broader transformation of surgical services for a sustainable and ethical health system in Canada. Commentary. Freely available at: https://www.cmaj.ca/content/cmaj/early/2020/05/06/cmaj.200791.full.pdf

Telemedicine and Technology


In the novel coronavirus disease (COVID-19) pandemic, social distancing has been necessary to help prevent disease transmission. As a result, medical practices have limited access to in-person visits. This poses a challenge to maintain appropriate patient care while preventing a significant backlog of patients once stay-at-home restrictions are lifted. In practices that are naive to telehealth as an alternative option, providers and staff are experiencing challenges with telemedicine implementation. We aim to provide a comprehensive guide on how to rapidly integrate telemedicine into practice during a pandemic. Evidence Based Guideline. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7192116/
Trauma and Orthopaedic Services

None this issue.

Treatments for COVID

See also CEBM


This review aimed to summarize and analyze the pattern identification (PI), herbal formulae, and composition of herbs provided by recent guidelines for the treatment of pediatric COVID-19. Seven data sources were reviewed until March 25, 2020. We analyzed the herbal formulae included in the guidelines and performed a network analysis to identify the frequency of herbs recommended in the herbal formulae. All 3 guidelines were provincial guidelines from China. Our results showed that there were 4 stages, 12 PIs, and 13 herbal formulae recommended by the provincial guidelines. These herbal formulae included a total of 56 herbs. Based on our network analysis, Scutellariae Radix was paired with Artemisiae Annuae Herba in one cluster. In another cluster, Armeniacae Semen was paired with Coicis Semen and Ephedrae Herba was paired with Gypsum Fibrosum. This review serves as a reference for the use of traditional medicine in the treatment of pediatric COVID-19. Review. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7152923/pdf/main.pdf


While this report may offer some assessment of the possible role of tocilizumab in the management of patients with severe COVID-19, it cannot lead to any firm conclusions. The observed dramatic decline in inflammatory markers, coupled with radiological improvement and reduced ventilatory support requirements are encouraging. However, the results need confirmation in adequately powered randomized controlled trials, several of which are currently underway in different parts of the world. Retrospective Study. Freely available at: https://onlinelibrary.wiley.com/doi/full/10.1002/jmv.25964


No therapeutics have yet been proven effective for the treatment of severe illness caused by SARS-CoV-2. In hospitalized adult patients with severe Covid-19, no benefit was observed with lopinavir-ritonavir treatment beyond standard care. Future trials in patients with severe illness may help to confirm or exclude the possibility of a treatment benefit. Randomised Clinical Trial. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7121492/


In this observational study involving patients with Covid-19 who had been admitted to the hospital, hydroxychloroquine administration was not associated with either a greatly lowered or an increased risk of the composite end point of intubation or death. Randomized, controlled trials of hydroxychloroquine in patients with Covid-19 are needed. Observational Study. Freely available at: https://www.nejm.org/doi/pdf/10.1056/NEJMoa2012410


In conclusion, corticosteroid use in subjects with SARS-CoV-2, SARS-CoV, and MERS-CoV infections delayed virus clearing and did not convincingly improve survival, reduce hospitalization duration or ICU admission rate and/or use of mechanical ventilation. There were several adverse effects. Because of a preponderance of observational studies in the dataset and selection and publication biases our conclusions, especially regarding SARS-CoV-2, need confirmation in a randomized clinical trial. In the interim we suggest caution using corticosteroids in persons with COVID-19. Systematic Review. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7199650/
Hydroxychloroquine and chloroquine have garnered unprecedented attention as potential therapeutic agents against COVID-19 following several small clinical trials, uncontrolled case series, and public figure endorsements. While there is a growing body of scientific data, there is also concern for harm, particularly QTc prolongation and cardiac arrhythmias. Here, we perform a rapid narrative review and discuss the strengths and limitations of existing in vitro and clinical studies. We call for additional randomized controlled trial evidence prior to the widespread incorporation of hydroxychloroquine and chloroquine into national and international treatment guidelines. Review. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7184359/pdf/ofaa130.pdf

A hyperinflammatory syndrome (HIS) may cause a life-threatening acute respiratory distress syndrome (ARDS) in patients with COVID-19 pneumonia. A prospective series of 100 consecutive patients admitted to the Spedali Civili University Hospital in Brescia (Italy) between March 9th and March 20th with confirmed COVID-19 pneumonia and ARDS requiring ventilatory support was analyzed to determine whether intravenous administration of tocilizumab (TCZ), a monoclonal antibody that targets the interleukin 6 receptor, was associated with improved outcome. Tocilizumab was administered at a dosage of 8 mg/kg by two consecutive intravenous infusions 12 h apart. A third infusion was optional based on clinical response. The outcome measure was an improvement in ARDS assessed by means of the Brescia COVID Respiratory Severity Score (BCRSS 0 to 8, with higher scores indicating higher severity) at 24-72 h and 10 days after tocilizumab administration. Out of 100 treated patients (88 M, 12 F; median age: 62 years), 43 received TCZ in the intensive care unit (ICU), while 57 in the general ward as no ICU beds were available. Of these 57 patients, 37 (65%) improved and suspended noninvasive ventilation (NIV) (median BCRSS: 1 [IQR 0-2]), 7 (12%) patients remained stable in NIV, and 13 (23%) patients worsened (10 died, 3 were admitted to ICU). Of the 43 patients treated in ICU, 32 (74%) improved (17 of them were taken off the ventilator and were discharged to the ward), 1 (2%) remained stable (BCRSS: 5) and 10 (24%) died (all of them had BCRSS>7 before TCZ). Overall at 10 days, the respiratory condition was improved or stabilized in 77 (77%) patients, of whom 61 showed a significant clearing of diffuse bilateral opacities on chest x-ray and 15 were discharged from the hospital. Respiratory condition worsened in 23 (23%) patients, of whom 20 (20%) died. All the patients presented with lymphopenia and high levels of C-reactive protein (CRP), fibrinogen, ferritin and interleukin 6 (IL-6) indicating a HIS. During the 10-day follow-up, three cases of severe adverse events were recorded: two patients developed septic shock and died, one had gastrointestinal perforation requiring urgent surgery and was alive at day 10. In conclusion, our series showed that COVID-19 pneumonia with ARDS was characterized by HIS. The response to TCZ was rapid, sustained, and associated with significant clinical improvement. Cohort Study. Abstract only. Please contact the library for full text.

The literature to date does not fully support the routine use of corticosteroids in COVID-19, but some findings suggest that methylprednisolone could lower mortality rate in more severe forms of the condition. Systematic Review. Freely available at: https://www.frontiersin.org/articles/10.3389/fmed.2020.00170/full

The outbreak of emerging infectious pneumonia caused by 2019 Novel Coronavirus (2019-nCoV) has posed an enormous threat to public health, and traditional Chinese medicine (TCM) have made vast contribution to the prevention, treatment and rehabilitation of coronavirus disease 19 (COVID-19) among Chinese population. As an indispensable part of TCM, Chinese patent medicines (CPMs) are highly valued and critically acclaimed in their campaign to contain and tackle the epidemic, they can achieve considerable effects for both suspected cases under medical observation period, and confirmed individuals with serious underlying diseases or critical conditions. Given this, based on the Guideline on Diagnosis and Treatment of Coronavirus Disease 2019 in China, the present review summarized the basic information, clinical evidence and published literatures of recommended CPMs against COVID-19. The details were thoroughly introduced involving compositions, therapeutic effects, clinical indications, medication history of CPMs and the profiles of corresponding research. With regard to infected patients with different stages and syndrome, the preferable potentials and therapeutic mechanism of CPMs were addressed through the comprehensive collection of relevant literatures and on-going clinical trials. This study could provide an insight into clinical application and underlying mechanism of recommended CPMs against COVID-19, with the aim to share the Chinese experience

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in clinical practice and facilitate scientific development of TCM, especially CPMs in the fierce battle of COVID-19.

**Review.** Freely available at: [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7198419/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7198419/)


Given the largely very low-quality evidence regarding benefits of the treatments that the panel considered, and given the panel’s inferences regarding patient values and preferences, the panel made almost exclusively weak recommendations against use of the interventions included in this guideline. The research community should interpret the weak recommendations that this guideline offers as a call to urgently undertake rigorous RCTs of the candidate interventions. **Evidence Based Guideline.** Freely available at: [https://www.cmaj.ca/content/cmaj/early/2020/05/04/cmaj.200648.full.pdf](https://www.cmaj.ca/content/cmaj/early/2020/05/04/cmaj.200648.full.pdf)

### Vaccines, Antibodies and Immunity


SARS-CoV-2 enters cells using its Spike protein, which is also the main target of neutralizing antibodies. Therefore, assays to measure how antibodies and sera affect Spike-mediated viral infection are important for studying immunity. Because SARS-CoV-2 is a biosafety-level-3 virus, one way to simplify such assays is to pseudotype biosafety-level-2 viral particles with Spike. Such pseudotyping has now been described for single-cycle lentiviral, retroviral, and vesicular stomatitis virus (VSV) particles, but the reagents and protocols are not widely available. Here, we detailed how to effectively pseudotype lentiviral particles with SARS-CoV-2 Spike and infect 293T cells engineered to express the SARS-CoV-2 receptor, ACE2. We also made all the key experimental reagents available in the BEI Resources repository of ATCC and the NIH. Furthermore, we demonstrated how these pseudotyped lentiviral particles could be used to measure the neutralizing activity of human sera or plasma against SARS-CoV-2 in convenient luciferase-based assays, thereby providing a valuable complement to ELISA-based methods that measure antibody binding rather than neutralization. **Freely available at:** [https://www.mdpi.com/1999-4915/12/5/513/htm](https://www.mdpi.com/1999-4915/12/5/513/htm)


COVID-19 is the most rapidly growing pandemic in modern time, and the need for serological testing is most urgent. Although the diagnostics of acute patients by RT-PCR is both efficient and specific, we are also crucially in need of serological tools for investigating antibody responses and assessing individual and potential herd immunity. We evaluated a commercially available test developed for rapid (within 15 minutes) detection of SARS-CoV-2-specific IgM and IgG by 29 PCR-confirmed COVID-19 cases and 124 negative controls. The results revealed a sensitivity of 69% and 93.1% for IgM and IgG, respectively, based solely on PCR-positivity due to the absence of a serological gold standard. The assay specificities were shown to be 100% for IgM and 99.2% for IgG. This indicates that the test is suitable for assessing previous virus exposure, although negative results may be unreliable during the first weeks after infection. More detailed studies on antibody responses during and post infection are urgently needed. **Product Testing.** Freely available at: [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7178815/pdf/ZIEE_10_1754538.pdf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7178815/pdf/ZIEE_10_1754538.pdf)

### Resources and Databases

**Clinicalskills.net**

This is a replacement for the Royal Marsden, with some 370 procedures that can be accessed. It will also house RWT procedures. Currently it is available via the trusts intranet only. You will find it on the Quick Links page of the intranet or [https://www.clinicalskills.net/dashboard](https://www.clinicalskills.net/dashboard) from a trust PC.
The following sources have been searched for evidence published in the previous week:

- American Journal of Medicine
- BMJ
- BMJ Best Practice
- CEBM Oxford
- Cochrane Library
- Coronavirus Research Database
- DynaMed
- Google Scholar
- HDAS Databases (Medline, Cinahl etc)
- JAMA
- KnowledgeShare
- LIS-Medical
- McMasterPlus
- Medscape
- New England Journal of Medicine
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- NHS Networks
- PubMed
- SCIE
- The Lancet
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- Twitter
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If you require a search for information or knowledge with respect to a particular group of patients (e.g. pregnant or elderly, with asthma or psychological illness) please do let us know and we will endeavour to search for you.

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